

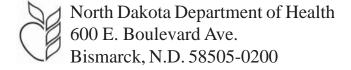


# Biennial Report 1999 to 2001

# North Dakota Department of Health Biennial Report 1999 to 2001

John Hoeven, Governor Dr. Terry Dwelle, State Health Officer

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# State Health Officer's Message



December 1, 2001

The North Dakota Department of Health is an incredibly diverse state agency, providing services from before birth to after death and covering a broad spectrum of public health issues from water quality to child passenger safety. As state health officer, I am proud of the department's public health professionals and the work they do to safeguard the health of all North Dakotans.

The 1999-2001 biennium was a period of transition for the department. Murray Sagsveen served as state health officer from February 1998 to December 2000; Robert Barnett was the interim state health officer from December 2000 until October 2001, when Governor John Hoeven appointed me to the office.

I am excited to lead the department as we "promote a healthier tomorrow." Some of my goals as state health officer include:

- Develop a strategic plan with goals and objectives for all areas of the NDDoH.
- Encourage increased networking with a variety of organizations, such as universities, nonprofit organizations and local public health units.
- Develop advanced public health education in the state.
- Establish and test innovative public health models, such as community-based health care, that focus on changing high-risk behaviors.
- Implement a comprehensive disaster-response system to ensure timely and effective emergency response.

As always, the public health community faces many challenges; some are old – such as immunizations and air quality – and some are new – such as threats from bioterrorism and new and emerging diseases. I'm confident the North Dakota Department of Health is ready to meet the challenges of today and tomorrow.

Please take some time to read this report and learn about the goals and accomplishments of the NDDoH during the 1999-2001 biennium.

Terry/Dwelle, M.D. State Health Officer

# A Look at the Department

#### Mission Statement

We, as public employees, are dedicated to the goal of assuring that North Dakota is a healthy place to live and to the belief that each person should have an equal opportunity to enjoy good health. To accomplish this mission, we are committed to the promotion of healthy lifestyles, protection and enhancement of the environment, and provision of quality health care services for the people of North Dakota.

#### State Health Council

The State Health Council serves as the North Dakota Department of Health's advisory body. The council's 11 members are appointed by the governor for three-year terms. Four members are appointed from the health care provider community, five from the public sector, one from the energy industry and one from the manufacturing and processing industry.

#### Physician Advisory Committee

When the state health officer is not a physician, state law requires the appointment of a three-member physician advisory committee whose members are recommended by the North Dakota Medical Association.

#### Department Overview

The North Dakota Department of Health employs about 300 people dedicated to making North Dakota a healthier place to live.

The four sections of the department are under the administrative supervision of the state health officer. They include:

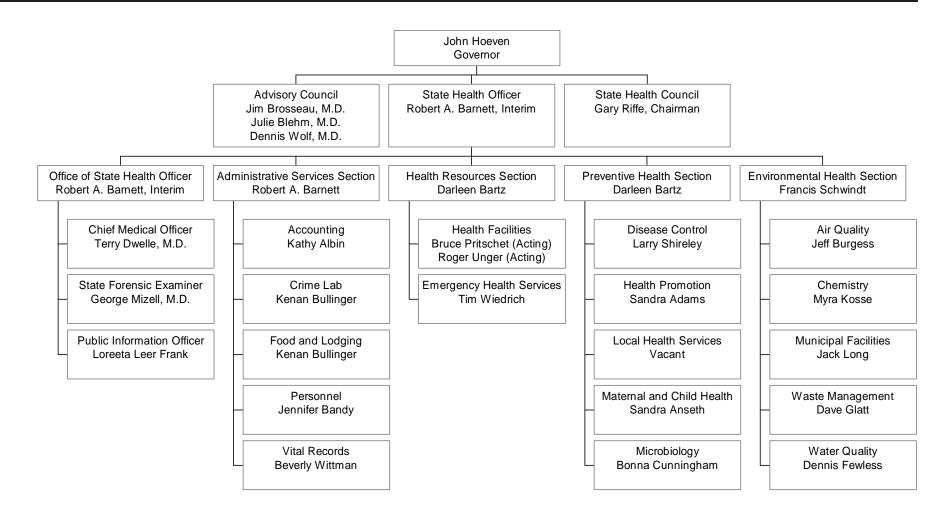
- Administrative Services
- Preventive Health
- Health Resources
- Environmental Health

Employees in these sections provide public health services that benefit the citizens of North Dakota.

The department logo is a representation of both apples and wheat. An apple is the universal symbol of good health and well-being; the wheat represents the richness of North Dakota's agricultural industry, the very foundation of our state's heritage.



# Organizational Chart



6 June 30, 2001

# Office of State Health Officer

#### State Health Officer

The state health officer is appointed by the governor to be the chief administrative officer of the department, as well as a member of the governor's cabinet. The state health officer implements state laws governing the department within the guidance of the governor and the rules adopted by the State Health Council. In addition, the state health officer is a statutory member of about a dozen boards and commissions, such as the governing board of the Public Employees Retirement System, the Children's Services Coordinating Committee and the State Water Pollution Control Board.

The Office of State Health Officer is composed of the following:

- Chief Medical Officer
- Public Information Officer
- State Forensic Examiner

#### Chief Medical Officer

The chief medical officer provides medical direction to programs throughout the NDDoH. Areas of emphasis include the health aspects of environmental pollution, newborn metabolic screening, communicable disease control, immunizations, infant mortality, adolescent suicide, cancer cluster investigations and the Children's Health Insurance Program.

#### Accomplishments

- Provided consultation to NDDoH sections about health-related programs, projects and patient-care issues.
- Improved communications between the chief medical officer and private physicians and clinics.
- Provided a variety of continuing medical education sessions on public health issues.
- Initiated the development of a lead plan for the state.
- Initiated development of a public health training program in conjunction with the University of Minnesota.
- Implemented an asthma disease management pilot program at Spirit Lake Nation.
- Provided pediatric consultation services for the tracking program and Indian Health Service clinic at Spirit Lake Nation.

#### Goals

- Continue to provide enhanced, focused clinical consultation support to NDDoH divisions.
- Provide consultation support for divisional clinical protocol development.
- Continue to provide presentations at medical meetings and response to disease outbreaks.
- Continue to provide other special clinical insight and consultation for NDDoH committees.

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#### **Public Information Officer**

The public information officer supports the department's communication of public health information, policies and resources to the citizens of North Dakota. Duties include coordinating media relations; preparing newsletters, brochures and other materials; coordinating special events; providing or arranging communication training; releasing information through the media; and working with various groups to promote public health.

#### Accomplishments

- Provided consultation to NDDoH personnel concerning media issues.
- Worked with FEMA to distribute flood and mold information to the public.
- Served on the Matters of Life and Death Project, a statewide initiative to address end-of-life issues.
- Developed and published *Surviving the Media Interview*, a guide for employees.
- Attended Bioterrorism and the Media national conference.
- Developed crisis communication plan for the NDDoH.
- Worked with NDDoH program staff to develop various brochures, reports and information campaigns for the public.
- Served on the Executive Board of the National Public Health Information Coalition.

#### State Forensic Examiner

The role of the state forensic examiner is to provide medical examiner services to county coroners and law enforcement officials in the investigation of sudden and unexpected deaths in North Dakota.

Once a case has been referred to the state forensic examiner, the body is brought to Bismarck for an autopsy. Services provided include autopsy or examination of the body, photographic documentation, toxicological analysis, collection of evidence, follow-up with investigating agencies, certification of cause and manner of death, and court testimony as needed.

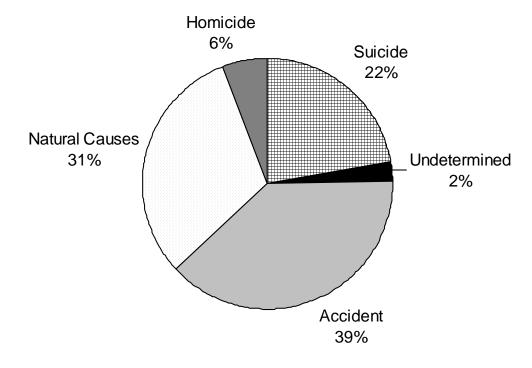
#### Accomplishments

- Accepted 373 cases during the biennium; performed autopsies on the majority of them.
- Provided education statewide to law enforcement officers, county coroners and other agencies involved in the investigation of deaths.
- Participated in the North Dakota Child Fatality Review Panel, the Mass Fatalities Incident Response Course and the National Disaster Medical System.
- Received referrals of cases from all geographical areas of the state, with local county coroners responding very favorably to availability of forensic examiner services.

#### Goals

- Pursue the development of a permanent facility and adequate number of staff to handle the caseload.
- Continue to provide educational activities for county coroners, law enforcement officers and other officials involved with death investigations.
- Continue to perform duties and to provide vital information to county coroners, law enforcement personnel, public health officials and families of the deceased in an effective, timely and courteous manner.

Coroner Referrals\*
1999-2001 Biennium
Manner of Death



# **Administrative Services Section**

The Administrative Services Section provides support services to all NDDoH divisions and assists in coordinating department activities. Divisions within the section provide services in the areas of personnel administration, fiscal management, health statistics and research, criminal justice and certification of vital events.

The section consists of the following divisions:

- Accounting
- Personnel
- Vital Records
- Crime Laboratory
- Food and Lodging

#### Division of Accounting

The Division of Accounting provides accounting and financial control records that comply with state and federal requirements.

This data is distributed monthly to department managers to help them monitor federal and state grant expenditures, revenue, and state appropriations. The division prepares financial reports, reviews grant applications, collects revenue, pays expenses, processes the payroll and submits the department's biennial budget.

The division is becoming more and more reliant upon electronic technology. Reports and funds that once were handled through the mail now are handled electronically.

#### Accomplishments

• Submitted the 2001-2003 biennial budget to the Office of Management and Budget in compliance with the governor's guidelines.

- Reduced general fund expenditures for the 1999-2001 biennium by 3 percent, and returned about \$162,000 to the general fund.
- Completed the Information Technology Plan in compliance with state requirements.
- Provided assistance to division directors and program managers through training programs on federal and state grants and appropriation monitoring.

#### Division of Personnel

The Division of Personnel provides a variety of services to the NDDoH, including employee relations, employee recruitment, position classification, training and development, salary administration, policy development and safety.

#### Accomplishments

- Conducted in-house training programs, including sexual harassment, safety in the workplace, violence prevention, train the trainer and supervisory management techniques.
- Enhanced the risk management program to include self-assessments of safety.
- Worked with the North Dakota Workers' Compensation Bureau to reduce the frequency and severity of workplace injuries.
- Implemented a new performance management system to provide more frequent and meaningful feedback to employees.
- Entered into a workforce partnership with five other local employers to provide additional high-quality training and to maximize dollars.
- Updated all support-staff classifications.

#### Division of Vital Records

The two main functions of the Division of Vital Records are registration and certification of vital events that occur in the state. This includes births, deaths, fetal deaths, marriages and divorces.

#### Accomplishments

- During the biennium, registered 17,726 certificates of live birth; 12,773 certificates of death; 100 certificates of fetal death; 9,010 marriage records; 4,315 divorce records; and 191 delayed registrations of birth. More than 134,000 requests for certified copies, record searches, amendments and verifications were processed. The fees collected for providing these services were deposited to the state's general fund.
- Compiled annual reports using data collected from vital event certificates. Also compiled data for specific requests from the public or other state agencies.

#### Goals

- Maintain 100 percent registration of all vital events in North Dakota. To achieve this goal, extensive querying and follow-up is done.
- Continue to provide timely responses to public requests for certified copies of vital event documents. Individuals now can order copies on the department's website using a credit card, which simplifies the ordering process. Vital event documents are needed for passport applications, school entrance, job applications, Social Security benefits, etc.

#### Division of Crime Laboratory

#### **Forensic Laboratory**

The Forensic Laboratory provides technical assistance to the criminal justice system in the investigation of crime. The laboratory accepts evidence from agencies, including prosecutors and law enforcement officers (local, county, state, federal and military), as well as defense counsels.

Lab assistance includes the recognition, recovery, packaging, marking and sealing of evidence. This evidence can be processed by the following techniques: examination for flammable chemicals used in arsons, drug identifications, firearm and tool mark examinations, serological tests, trace evidence examinations, special photographic techniques, development of latent fingerprints, comparison of tire and footwear impressions, and DNA profiling.

Drug identification is a major area of analysis and includes identification of clandestine drugs, pharmaceuticals and chemical compounds.

#### Accomplishments

- Purchased modern equipment for drug and trace evidence analysis.
- Provided staff training on DNA, firearms, drug and arson analysis, and crime scene and clandestine lab investigations.

#### Vital Signs

On an average day in North Dakota:

- 24 babies are born; 3 of them are born out of wedlock, and 1 is born to a teenage mother.
- 17 people die, 4.8 of them from heart disease and 3.7 from cancer.
- 12 couples are married, and
   6 couples are divorced.

#### In an average week:

- 1 infant dies.
- 1 child between the ages of 1 and 19 dies.
- 1 person commits suicide.
- 4 die from diabetes.
- 2 die from influenza and pneumonia.
- 5 die as a result of accidents.

#### In an average month:

- 2 children younger than age 20 die as a result of some type of accident.
- 14.6 people die as a result of motor vehicle accidents.

The average age at death is 79.7.

- Processed evidence from 6,415 cases and testified at 39 trials.
- Implemented DNA testing, established a DNA database of convicted sex offenders, and updated laboratory techniques.
- Began validation process for DNA testing.

#### Goals

- Provide rapid, accurate analysis of evidence and minimize case backlog.
- Develop new evidence tracking and reporting process.
- Continue staff training and development in criminal case work.
- Continue pursuit of Crime Laboratory accreditation.

#### **Toxicology Laboratory**

The Toxicology Laboratory provides technical assistance to the criminal justice system, coroners and the medical community for traffic safety, death investigations and other purposes. Staff members accept evidence from local, county, state, federal and military agencies. Assistance includes training officers in breathalcohol determination, maintenance of breathtesting instruments, blood-alcohol analysis, and chemical drug and toxic substance analysis. The laboratory also provides expert testimony in criminal prosecutions and traffic safety hearings.

#### Accomplishments

- Performed 8,120 analyses for alcohol and other drugs on 5,446 submitted cases.
- Inspected, maintained and repaired more than

- 650 preliminary and 114 evidential breathalcohol instruments, as well as 260 wet-bath calibrators.
- Conducted 85 classes to train 920 officers who were responsible for conducting 5,586 breathalcohol tests.
- Testified in more than 50 administrative hearings and court trials.
- Developed new postmortem kits that increased compliance and reporting efficiency on traffic fatalities.

#### Goals

- Provide accurate, rapid analysis of evidence and ensure quality breath-alcohol testing.
- Provide statewide training for breath-testing recertification classes via the Interactive Video Network.
- Continue integrating new generation breathtesting devices capable of electronic data transmission.
- Continue expanding drug analysis capabilities to keep pace with new pharmaceuticals.

#### Division of Food and Lodging

The Division of Food and Lodging is responsible for protecting public health through licensing and inspection of restaurants, hotels, motels, bars, mobile-home parks, campgrounds, bed-and-breakfast facilities, retail food stores, meat markets, bakeries and assisted-living facilities. Inspection procedures ensure that these licensed establishments meet both sanitation and certain fire/life safety standards before opening to the public and while in operation.

Under an agreement with the Department of Human Services, staff members also inspect preschools and day care centers that prepare food. The division provides educational courses in safe food handling, reviews plans for new establishments and extensive remodeling projects, and helps investigate possible foodborne illness outbreaks.

The division serves as the Food and Drug Administration's (FDA) liaison in the state on issues related to manufactured food and pesticide residues in food.

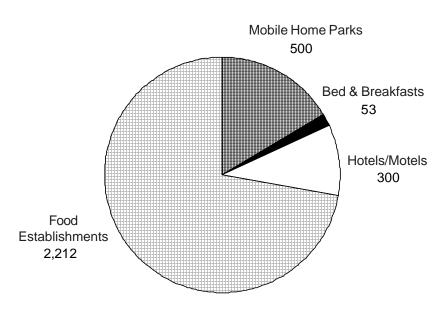
#### Accomplishments

- Developed a new licensing program that provides enhanced reporting capabilities and is Y2K compliant.
- Conducted more than 5,000 inspections of licensed facilities.

#### Goals

- Amend Section 33-33-04 of the North Dakota Administrative Code to conform with FDA's 2001 Model Food Code.
- Review and update the mobile-home park, trailer park and campground statutes and rules to conform with national codes.
- Review and develop minimum requirements for primitive lodging facilities.

# Establishments Licensed by the Division of Food and Lodging



# **Health Resources Section**

The Health Resources Section consists of two divisions – Health Facilities and Emergency Health Services.

The section is responsible for:

- Licensing inpatient and outpatient health care facilities, basic care facilities, home health agencies, ambulance services, hospice programs, electrologists and electronic hair removal technicians, and certification of emergency medical technicians.
- Certification surveys of all facilities and programs that provide service to people eligible for the federal Medicare and Medicaid programs; certification is voluntary but required for the provider or supplier to receive payment through Medicare and Medicaid.
- Certification of all clinical laboratories that test human body substances for medical purposes.
- Administration of the alternative health care projects program.
- Administration of the nurse aide training and competency evaluation programs and registry.
- Administration of the emergency health services system.
- Providing assistance to communities in determining if alternative health care services are feasible.



The Division of Health Facilities strives to ensure that the buildings, equipment and staff of North Dakota's inpatient care facilities and outpatient programs provide services consistent with generally accepted practice and meet applicable standards.

Licensure responsibilities of the division include:

- General acute, primary care and specialized hospitals – 51
- Nursing facilities 87
- Home health agencies 39
- Hospice programs –16
- Basic care facilities 45
- Electrologists and electronic hair removal technicians – 21

Contractual certification responsibilities include:

- Long-term care nursing facilities 87 facilities with 6,753 beds
- Hospitals, including swing beds and general acute services – 47 general acute care and critical access hospitals with 3,108 beds; four specialized hospitals with 279 beds
- Intermediate care facilities for the mentally retarded 66 facilities with 740 beds
- Home health agencies 39
- Hospice programs 16
- Rural health clinics 73
- Clinical laboratories that are state surveyed and certified – 74



- Ambulatory surgical centers 17
- End stage renal dialysis units 14
- Portable X-ray units two

Staff members conduct annual surveys to determine compliance with state licensure requirements and federal certification Conditions of Participation contained in Title XVIII (Medicare), Title XIX (Medicaid) and CLIA of the Social Security Act. In addition, the division is responsible for investigating complaints.

The licensure and certification surveys are conducted by surveyors who represent a wide range of professional disciplines, including certified lab technicians, licensed social workers, licensed registered dietitians, registered nurses, physical therapists, qualified mental retardation professionals and fire safety surveyors.

The nurse aide training and competency evaluation programs provide for state approval of nurse aide training programs in order to be consistent with federal certification requirements for long-term care facilities.

#### Accomplishments

- Implemented automation of the federally mandated Resident Assessment Instrument for nursing homes and the Outcome and Assessment Information Set for home health agencies. Through these systems, all nursing homes and home health agencies electronically submit assessment information directly to NDDoH.
- In conjunction with the North Dakota Long Term Care Association, provided several oneday workshops for long-term care providers.

These workshops focused on care-related services identified through the survey process.

#### Goals

- Maintain the average survey interval of 12 months or less for long-term care facilities.
- Address complaints in a manner consistent with revised federal and state guidelines.
- Ensure that new surveyors receive adequate training to pass the national Surveyor Minimum Qualifications Test on the first attempt.
- Increase the number of onsite surveys of hospitals.
- Implement the certification of critical access hospitals as permitted by the federal Rural Hospital Flexibility Act.

# Division of Emergency Health Services

The Division of Emergency Health Services is the lead agency for North Dakota's Emergency Medical Services (EMS) System. The division conducts the following activities:

- Annually licenses 141 ground ambulance services that meet standards for service availability, equipment and personnel training.
- Updates and maintains training, testing and certification programs for EMS advanced life support and basic life support personnel,

- including emergency medical technicians and paramedics.
- Administers an EMS grant program of about \$470,000 per year for training ambulance service personnel.
- Provides technical assistance to local EMS services regarding patient care issues, as well as system design, administration and operation.
- Maintains an EMS personnel data system that contains about 10,000 certification records.
- Maintains an ambulance run report data system that adds about 30,000 ambulance run records per year.
- Provides critical incident stress debriefing services to law enforcement, fire and EMS personnel engaged in EMS.
- Maintains a certified nurse aide registry with about 9,500 registrants.
- Provides continuing education to emergency medical services through distance learning and videotape presentations.
- Implements and maintains a statewide trauma system.

#### Accomplishments

- Conducted programs that trained, tested and certified about 2,100 new personnel and 3,000 existing personnel. Courses included First Responder, Emergency Medical Technician-Basic (EMT-B), Emergency Medical Technician-Intermediate (EMT-I) and Emergency Medical Technician-Paramedic (EMT-P).
- Provided licensing and inspection services for 141 ambulance services.

- Conducted distance learning through a videotape-based system that provides monthly continuing education material to 250 sites.
- Provided about 40 critical incident stress debriefings to EMS personnel; conducted training for about 300 EMS providers in healthy stress-coping techniques.
- Maintained a trauma system that designates 29 trauma centers, develops local trauma transport plans, maintains a trauma registry and trains EMS and trauma center personnel.
- Conducted an emergency medical services for children (EMSC) program that trained about 200 EMS providers in special pediatric techniques.
- Provided nurse aide registry services for about 3,600 personnel.

#### Goals

- Implement strategies that attempt to minimize the adverse impact of several negative factors on the state's EMS system. These factors include reduced population, greater concentrations of older citizens, a reduction in the level of volunteerism, and inadequate reimbursements. Strategies include the following:
  - \* Improved access to training through expansion of Internet- and video-based training.
  - \* Revision of service licensure requirements to facilitate regionalization of EMS services.
  - \* Development of quick-response units to replace struggling ambulance services, when appropriate.

### Preventive Health Section

The Preventive Health Section is responsible for maternal and child health, health promotion, disease control and public health microbiology services in the state. The section's goal is to promote health and prevent illness and disease. Many of these services are provided by local public health units.

The section includes the following:

- Maternal and Child Health
- Health Promotion
- Disease Control
- State Epidemiologist
- Local Health Coordinator
- Microbiology

# Division of Maternal and Child Health

The mission of the Division of Maternal and Child Health (MCH) is to ensure healthy women, children and families. The division supports and encourages better health through education, policy development, advocacy and partnerships.

Programs within the division include:

- Abstinence Education
- American Indian Services
- Arthritis
- Child/Adolescent Health
- Domestic Violence/Rape Crisis
- Family Planning
- Genetics
- Injury Prevention
- Lead Screening
- MCH Nursing

- MCH Nutrition
- Newborn Screening
- Optimal Pregnancy Outcome Program (OPOP)
- Oral Health
- Prenatal Risk Assessment Monitoring System (PRAMS)
- State Systems Development Initiative (SSDI)
- Sudden Infant Death Syndrome (SIDS)
- WIC (Special Supplemental Nutrition Program for Women, Infants and Children)
- · Women's Health

#### Accomplishments

- Participated in the first and second annual Stand for Children events, which promoted health education for youth.
- Completed statistical analysis of the 1999 New Mother's Survey.
- Completed a five-year strategic plan, partially based upon a multi-agency planning retreat.
- Participated in the first Public Health Association's MCH Leadership Institute; North Dakota was one of 10 states chosen to participate.

#### **Abstinence Education**

 Provided federal funds to eight Regional/Tribal Children's Services Coordinating Committees and one local public health unit to provide abstinence-only education activities.

#### **American Indian Services**

• Held a conference to educate health care providers about smoking-cessation programs for pregnant American Indian women.



#### **Arthritis**

- Entered into a three-year collaborative agreement with the Centers for Disease Control and Prevention to develop the North Dakota Arthritis Program and an arthritis action plan.
- Provided training through the Arthritis Foundation for leaders certified to teach self-help courses to people who have arthritis.

#### **Child/Adolescent Health**

- Developed a pediatric resource guide to assist with referral and education for the Health Tracks Program and public health nursing.
- Collaborated with the Department of Human Services and Child Care Resource and Referral to provide consultation and educational services for child care and Head Start.
- Collaborated with the North Dakota Nurses
   Organization to develop a statewide school
   nursing listserv that enhances communication
   and networking.
- Presented information about the Healthy Child Care Project to states in Region VIII.

#### **CompCare Technical Assistance**

 Received technical assistance through the CompCare Initiative to gain a better understanding of the knowledge, perceptions and behaviors of parents regarding the utilization of preventive and well-child services.

#### **Domestic Violence/Rape Crisis**

• Provided state and federal funds to local agencies that serve victims of domestic violence, sexual assault and stalking.

- Sponsored training that focused on the role of professionals during a domestic violence investigation and promoted coordinated community response.
- Distributed STOP Violence Against Women funds to law enforcement, prosecution, victimservice and community agencies that provide services to victims.

#### **Family Planning**

- Provided medical and education/counseling family planning services to more than 19,000 North Dakotans.
- Developed standardized medical protocols for all services within the Family Planning Program.
- Revised the policies and procedures manual.
- Initiated expansion of services to include satellite clinics on each North Dakota Indian reservation, as well as at United Tribes Technical College.

#### **Injury Prevention**

- Completed observation surveys to measure restraint use by children younger than age 11, which indicated that 99.1 percent of infants younger than 1 were properly restrained, as were 78.9 percent of toddlers ages 1 through 5, and 58.7 percent of children ages 6 through 10.
- Conducted six 32-hour child passenger safety courses and certified 107 individuals as child passenger safety technicians.
- Provided 1,640 car safety seats to 57 local car seat programs for distribution to parents of young children, and trained parents in the proper use and installation of the car seats.

- Distributed 3,100 bike helmets to 41 local agencies for distribution to children, and provided instructions about proper helmet fit.
- Coordinated or assisted with car safety seat checkup events in 68 communities, inspecting about 1,200 car seats.
- Coordinated and sponsored a statewide Injury Prevention and Traffic Safety Conference.
- Prepared and distributed Suicide by North Dakota Children, Teenagers and Young Adults – The North Dakota Response.
   Continued coordination of and chairing the Adolescent Suicide Prevention Task Force.
- Participated in and reviewed childhood deaths for the Child Fatality Review Panel.
- Assisted the U.S. Consumer Product Safety Commission with product recalls and effectiveness checks.

#### **Lead Screening**

• Developed a targeted blood lead screening program to determine the prevalence of blood lead poisoning among North Dakota children.

#### **MCH Nursing**

 Participated in the "Bringing Public Health Nursing Into the 21st Century" satellite training.

#### **MCH Nutrition**

- Established and coordinated the Obesity Prevention Work Group, which organized the *Eat Well, Play More: Promoting Health Weight for North Dakota Children* statewide summit.
- Provided support to local nutritionists to

address the issues of healthy weight for children and adolescents and to promote healthy eating and physical activity for all family members.

#### **Newborn Screening**

• Screened all newborns for four medical conditions: Phenylketonuria (PKU), Hypothyroidism, Galactosemia and Congenital Adrenal Hyperplasia (CAH). Early identification and treatment of these conditions prevent mental retardation and save thousands of dollars in special education and health care costs.

# Optimal Pregnancy Outcome Program (OPOP)

 Developed fact sheets for each month of pregnancy and distributed them to OPOP clients to provide expectant mothers with information about the growth of the unborn child, changes to the mother's body and the mother's responsibilities during her pregnancy.

#### **Oral Health**

- Served more than 19,000 mothers and children through school fluoride programs, oral health education, and screening and referral efforts.
- Completed a statewide oral health survey, which showed that the number of children who have cavities is increasing, while the number of children who have preventive dental sealants and untreated cavities remains the same.
- Completed workforce studies to assess current status and plan for the state's future needs, focusing on recruitment and retention.

- Convened a statewide dental summit to determine oral health policy priorities; established a dental mentoring program, re-instituted a dental externship program, increased the number of slots for North Dakota students in out-of-state dental schools, and implemented a statewide Donated Dental Services program and a dental loan repayment program, both funded by the 2001 Legislative Assembly.
- Convened a tri-state Dental Workforce Forum to explore options for providing dental education in the Dakotas, as well as a tri-state Dental Task Force to determine strategies for increasing the dental workforce.

#### Prenatal Risk Assessment Monitoring System (PRAMS)

• Received a grant from the Centers for Disease Control and Prevention to obtain populationbased information about women's experiences before, during and following pregnancy.

# **State Systems Development Initiative** (SSDI)

- Assisted in coordination of needs assessment, data collection and data reporting for the MCH Block Grant. SSDI is a cooperative program with the Department of Human Services.
- Developed and distributed fact sheets for MCH priorities identified from the needs assessment.

#### **Sudden Infant Death Syndrome (SIDS)**

 Updated SIDS program protocols for local public health units and the Indian Health Service, agencies that offer support to families

- whose infants died from SIDS.
- Included information in the *Parenting First Year* newsletter regarding the importance of placing infants on their backs while they sleep to reduce the risk of SIDS.

#### WIC

- Provided supplemental foods, nutrition education and referrals for health and support services to nearly 13,000 mothers and children each month through contracts with 28 local health care providers.
- Continued participation in the Health Passport Project, in which a smart-card carries health information, allowing participants to access services more easily.
- Developed a WIC information management system with the Iowa WIC Program designed to increase efficiency and reduce costs.
- Supported a statewide breastfeeding conference, co-sponsored a statewide lactation-counseling workshop, and provided electric breast pumps for loan to breastfeeding mothers.
- Partnered with the Harvard School of Public Health to research the relationship between diets and the health of WIC participants.

#### Women's Health

- Contributed to the Region VIII Women's
   Health Status Indicators project, producing a
   database of statistics that focus on women's
   health.
- Developed a women's health resource document with information about programs that provide services to women of any age.

#### Division Goals

- Improve the health of North Dakota citizens by the year 2010. Using Year 2010 Objectives, systematically collect, analyze, interpret, disseminate and use data to understand the health status of the MCH population, assess progress and plan effective prevention programs.
- Continue to provide technical assistance to subgrantees of the MCH Title V Abstinence-Only Education grant.
- Monitor the rate of infant mortality in the American Indian population.
- Continue to serve as the liaison to the North Dakota Arthritis Partnership Committee and to the public, until the program is phased out (September 2002).
- Establish an arthritis resource library for use by local public health units and other interested parties.
- Work with the North Dakota School Nurse Organization to strengthen partnerships throughout the state.
- Develop activities that promote healthy lifestyles for children and adolescents.
- Continue to work towards the reduction of domestic violence, sexual assault and stalking crimes in North Dakota.
- Develop a plan to allocate funds for the courts from the STOP Violence Against Women Act, re-authorized by Congress in 2001.
- Develop a long-range state oral health improvement plan to promote cost-effective approaches for oral health promotion, disease prevention and dental care access.

- Continue to provide prenatal education that helps pregnant women make healthy lifestyle choices; complete an evaluation of the pilot OPOP sites using the booklet *A Pregnant Woman's Guide to Quit Smoking* to determine if the material was useful in reducing smoking among pregnant women who receive services.
- Use Prenatal Risk Assessment Monitoring System data to develop maternal and infant health programs and policies, with the goal of improving the health of mothers and infants.
- Continue to coordinate follow-up services for families who suffer SIDS deaths and to provide SIDS information/education to health care professionals and the public to reduce the risk of SIDS.
- Develop a computer data collection tool for the SIDS program.



#### Division of Health Promotion

The mission of the Division of Health Promotion is to enable communities to promote healthy behaviors that prevent and control chronic disease, thus reducing health care costs and improving the quality of life.

Intervention programs in communities, schools and local agencies focus on tobacco-free lifestyles, healthy eating, regular physical activity and use of preventive health services for early detection. Support programs collect data about healthy behaviors and incidence of disease and provide educational resources for communities, schools and health professionals.

Programs and services include:

- Cancer Prevention and Control
- Cardiovascular Health
- Tobacco Prevention and Control
- School Health
- Youth Risk Behavior Survey
- Cancer Registry
- Diabetes Control

#### Accomplishments

#### **Cancer Prevention and Control**

 Continued to focus on breast and cervical cancer screening for medically underserved women by participating in the National Breast and Cervical Cancer Early Detection Program. North Dakota's program, known as Women's Way, has expanded its partnerships to provide screening services to a growing number of eligible women. Through local public health units, private health care providers and a

- statewide volunteer network, *Women's Way* has provided screening services to women age 18 to 64 in every North Dakota county.
- Screened more than 4,000 eligible women for breast and cervical cancer, of whom about 9 percent are American Indian. Screenings detected 29 cases of breast cancer and 64 cases of cervical dysplasia requiring treatment. Each enrolled woman diagnosed with cancer has received treatment.
- Recruited, trained and supported 700 *Women's Way* volunteers. The volunteer network uses woman-to-woman and small-group strategies to encourage annual cancer screening.
- Collaborated with state Medicaid to develop guidelines and procedures to pay for breast or cervical cancer treatment for Women's Way clients.
- Continued involvement with North Dakotans
   Partnering for Women's Health. This organization, chaired by North Dakota's First Lady,
   hosts an annual statewide Women's Health
   Summit.
- Provided professional development for health care providers, including clinical breast exam training and a symposium on cervical health.
- Developed a plan for consistent public education activities conducted on an established timeline; managed an extensive research project to create appropriate posters to appeal to *Women's Way* target audience.

#### **Cardiovascular Health**

 Worked to improve the cardiovascular health of North Dakotans by promoting healthy lifestyles

- and policies that increase physical activity and improve eating behaviors.
- Collaborated with local nutritionists and county extension agents to promote 5 A Day for Better Health, a national nutrition campaign that encourages Americans to eat five or more servings of fruits and vegetables each day. Activities were implemented through public awareness campaigns, lifestyle-change programs and creation of supportive environments.
- Worked with the North Dakota Healthy Heart Council, a statewide coalition that supports heart-healthy lifestyles, to recognize nine communities as 5 Plus 5 Communities.
- Conducted a survey of 245 primary-care physicians about their physical activity counseling practices. Survey results will be used in the state cardiovascular health plan to direct future interventions with health care providers.
- Collaborated with the Obesity Prevention Work Group to coordinate the "Eat Well, Play More: Promoting Healthy Weight for North Dakota Children" statewide summit.

#### **Tobacco Prevention and Control**

• Worked with two communities to pass ordinances that reduce youth access to tobacco. Sixteen communities now restrict vending machines, license tobacco retailers, require retail compliance surveys, and place tobacco behind clerk-operated counters. These ordinances reach more than one-half of the youth population. Retailer compliance with the law prohibiting sales to minors is increasing, up from 81 percent in 1999 to 89 percent in 2000. In

- addition, eight communities conduct retail complaince checks to enforce ordinances.
- Continued efforts to eliminate exposure to environmental tobacco smoke. In 2001, Minot became the first North Dakota city to pass an ordinance making restaurants smoke free. Since 1995, the number of smoke-free restaurants in the state has increased fourfold.
- Continued support of the Power Against Second Hand Smoke program (PASS), which reached 8,000 middle school students.
- Increased tobacco-use surveillance efforts.
   Tobacco-related questions were included in various statewide surveys; data indicated higher rates of smoking among American Indians, low-income individuals, and students in rural schools, which have fewer resources for cessation services.
- Supported efforts to address tobacco prevention and control among the state's American
   Indian population, including formation of the Intertribal Tobacco Abuse Coalition.
- Supported efforts to promote quitting among adults. Coalition members attended various training opportunities, and five communities began offering cessation services.
- Provided training to 224 teachers on the Life Skills and Project TNT tobacco-use prevention curricula, which focus on positive life skills to help children stay tobacco free.

#### **School Health Program**

• Completed a *Youth Risk Behavior Survey* and a *School Health Education Profile* in conjunction with the Department of Public

- Instruction (DPI). Survey results were provided to local school boards, administrators, educators and other decision makers to help plan programs that address common youth health problems such as tobacco use, poor food choices and physical inactivity.
- Collaborated with DPI to coordinate the annual Roughrider Health Promotion Conference, which brings together school and community teams who return to their local communities with plans to protect youth from health risks. These school-based teams carry out activities that reach more than 72,000 residents.
- Collaborated with the Division of Maternal and Child Health and DPI to establish a state agency-based school health team that regularly meets to address youth risk behaviors.

#### **Cancer Registry**

- Published the first cancer registry annual report, which received a silver award from the National Public Health Information Coalition.
- Provided the American Cancer Society with data for the *Rocky Mountain Cancer Facts* and *Figures* publication.
- Completed data submissions to the CDC
   National Program of Cancer Registry Cancer
   Surveillance System and to the North American
   Association of Central Cancer Registries,
   earning a Gold Standard certification.
- Participated in a CDC-sponsored audit required of federally funded cancer registries.
- Investigated a cancer cluster inquiry in Burke County, with the results presented at the annual NAACCR meeting.

#### **Diabetes Control**

- Continued statewide initiatives with the North Dakota Diabetes Partnership, including conferences, diabetes registry and care tracking projects, satellite presentations, and diabetes care and complications surveillance.
- Coordinated placement of a diabetes check box on death certificates to facilitate accurate data; published results of the project in the January 2001 issue of the *American Journal of Public Health*. Eighteen percent of North Dakotans who died between 1992 and 1996 had diabetes; for 15 percent, diabetes was the underlying cause of death.
- Collaborated with the North Dakota Health Care Review Inc. to produce the 1999 North Dakota Diabetes Surveillance Report.
- Partnered with Blue Cross Blue Shield to establish a claim-based reporting system for diabetes care standards. Overall percentages show an increase from 8 percent to 20 percent in providing five measured care standards.
- Awarded capacity-building grants and provided technical assistance to several statewide clinics and diabetes centers to implement the diabetes registry and care tracking system developed by North Dakota Health Care Review Inc.
- Continued collaboration to develop and computerize a diabetes checklist for assessing and improving preventive-care services.
- Developed and distributed a community resource guide through the NDSU Extension Service with resource materials focusing on diabetes services.

#### Division Goals

- Provide cancer screening services to 3,200 eligible North Dakota women each year.
- Develop and implement plans for quality assurance and *Women's Way* program evaluation.
- Develop materials for *Women's Way* specific to the state's American Indian population.
- Monitor treatment of women diagnosed through *Women's Way* who receive Medicaid coverage.
- Support cardiovascular health assessment, coalition development, program implementation and evaluation in local communities.
- Develop a state plan outlining specific strategies to promote cardiovascular health.
- Support community physical activity and nutrition intervention, as well as policy and environmental conditions that encourage hearthealthy lifestyle choices.
- Establish a benchmark for the scope of wellness-related policy and environmental conditions currently offered by North Dakota employers; use data to implement worksite pilot intervention programs.
- Develop a long-range state tobacco prevention and control plan.
- Implement the Community Health Grant Program. Enacted by the 2001 Legislative Assembly, the program is designed to prevent or reduce tobacco usage by strengthening community-based public health programs and assisting public health units and communities.
- Continue working with local communities to develop and implement comprehensive tobacco control programs using the Centers for Disease

- Control and Prevention Best Practices for Comprehensive Tobacco Control Programs.
- Strengthen quality local school health programs by coordinating efforts with other state agencies on the School Health Team.
- Continue to collect data about youth risk behaviors and school health program status; provide surveillance results to program planners and key decision makers.
- Provide follow-up training and technical assistance to schools that attend the annual Roughrider Health Promotion Conference.
- Obtain cancer data from clinics and independent physician offices.
- Publish an in-depth, site-specific Cancer Registry report, as well as the annual report.
- Develop audit processes to ensure all diagnosed cancers are reported to the state registry.
- Obtain additional data exchange agreements with other states for the Cancer Registry.
- Expand data agreement with Aberdeen Area IHS to include all North Dakota reservations.
- Reconvene the Diabetes Advisory Council and continue development of the Diabetes Partnership to enhance collaborative projects.
- Develop a master plan for evaluation and surveillance for diabetes; complete the 1994-2000 BRFSS comprehensive data report.
- Continue and expand clinic-based registry and care tracking projects for diabetes; encourage laboratory interface into the systems.
- Develop community projects to supplement clinical efforts in management of diabetes.

#### **Division of Disease Control**

The Division of Disease Control identifies and analyzes disease trends and implements appropriate intervention activities to reduce illness and death. The division also acts as a resource for health care providers and the public regarding public health issues and often works with the media to provide timely public education.

Programs within the division include:

- Immunization
- Sexually Transmitted Diseases
- HIV/AIDS
- Tuberculosis Control
- Epidemiology

The division consists of 10 staff members who coordinate program activities, six field epidemiologists who conduct epidemiological activities throughout the state, and three support staff personnel.

Cooperative agreements with the Centers for Disease Control and Prevention (CDC) and the U.S. Department of Health and Human Services, Health Resources and Service Administration (HRSA), provide program assistance and financial support to the division.

Health care providers and laboratories statewide notify the division of mandated reportable diseases. During the biennium, division personnel investigated about 2,300 cases of reportable conditions. In addition, division personnel work closely with private health care providers, health care facilities, local public health units and residents to reduce the incidence of

communicable diseases and to help ensure the public health of North Dakotans.

#### **Division Accomplishments**

- Investigated a case of foodborne botulism, the first case reported in the state since 1982; investigated a case of infant botulism, the first case since 1977. Both cases survived.
- Investigated four foodborne outbreaks involving nearly 400 people. One outbreak involved North Dakota residents who had vacationed in the Dominican Republic.
- Participated in a national investigation of respiratory illnesses among college students vacationing in Mexico.
- Initiated an arboviral-encephalitis surveillance and testing program with the State Veterinarian, the North Dakota Game and Fish Department and the National Wildlife Service.
- Received funding from the CDC to conduct activities to increase epidemiological and laboratory capacity.
- Initiated a project to develop an electronic reporting system in coordination with public and private health care providers.

#### **Immunization Program**

The role of the Immunization Program is to ensure that children and adults are protected against vaccine-preventable diseases. In addition, the program investigates suspected and confirmed cases of vaccine-preventable diseases and conducts active influenza surveillance.

Vaccine coverage levels for children remained high during the biennium. The National Immuniza-

tion Survey (NIS) estimated that 80 percent of North Dakota children ages 19 months to 35 months were up to date on their immunizations. This estimate representes the percentage of children in the age group who received four diptheria/tetanus/pertussis (DTP), three polio, one measles/mumps/rubella (MMR), three *Haemophilus influenzae* type b, and three hepatitis B vaccines. The goal for Healthy People 2010 is 90 percent.

#### Accomplishments

- Expanded hepatitis A vaccination for children who live in counties of high risk.
- Implemented the hepatitis B vaccination school entry requirement for children who enter kindergarten, beginning in 2000.
- Began distribution of new pneumococcal conjugate vaccine (Prevnar) to VFC (Vaccines for Children) eligible children.
- Collaborated with the state's Medicaid program to develop proposal to measure immunization-coverage rates of children enrolled in Medicaid.
- Transitioned from the distribution of preservative-containing hepatitis B vaccine to preservative-free vaccine; transitioned from the distribution of live polio vaccine to inactivated vaccine.
- Partnered with Blue Cross Blue Shield to develop a method to use the state immunization registry for measuring immunization coverage of children enrolled in Healthy Steps.
- Implemented an enhanced method to assess immunization-coverage levels through the incorporation of statewide immunization registry data with software from the CDC.

#### **STD Program**

The goal of the Sexually Transmitted Disease (STD) Program is to prevent and control the spread of sexually-acquired infections. Staff members provide education, interviewing partner notification, and referral for screening and clinical services.

#### Accomplishments

- Continued to screen young women for chlamydia through participation in the Region VIII chlamydia project.
- Observed a 1.8 percent decrease in reported chlamydia cases, from 1,954 cases the previous biennium to 1,918 this biennium.
- Continued to conduct sex-partner notification for reported chlamydia cases. During the biennium, 1,957 partner contacts were initiated, 352 cases were diagnosed, and another 945 received therapeutic or preventive treatment.
- Observed a 23.5 percent decrease in reported gonorrhea cases, from 170 cases the previous biennium to 130 this biennium.
- Revised gonorrhea screening criteria to complement new testing technology being used at the Public Health Laboratory.

#### **HIV/AIDS Program**

The **HIV Prevention Program**'s mission is to reduce and prevent the transmission of HIV and to reduce the associated illnesses and deaths of HIV-infected people. HIV prevention services are conducted at 21 contractual sites, including local public health units, family planning clinics, college/university student health centers, and

During the biennium, 15- to 19-year-old adolescents and 20- to 24-year-old young adults accounted for 80 percent of chlamydia cases in the state. Females composed 72 percent of the cases – reflecting screening practices aimed at reducing chlamydia-related infertility in females.

Although a higher percentage of chlamydia cases were reported in women, the percentage of reported male cases has been increasing slowly during the past four years.

substance-abuse treatment centers. The services include HIV testing, pre- and post-test risk-reduction counseling, partner notification, referrals, and prevention education.

#### Accomplishments

- Contracted with:
  - \* The University of North Dakota (UND)
    Department of Counseling to conduct the first annual *Safe Connections* workshop designed specifically to educate gay men about HIV prevention and sexual wellness.
  - \* A local advertising agency to create and implement an HIV prevention media campaign specific to the state's Native American population. The campaign utilized radio, newspapers, posters, brochures and videos to promot the theme Call Upon Your Spirit of Courage: What You Should Know About HIV Prevention. The advertising agency established and utilized a Native American advisory committee for campaign development to ensure the campaign was culturally appropriate.
  - \* The UND Department of Research, the UND Department of Counseling and an independent contractor to conduct HIV prevention needs assessments of locally identifited populations at high risk for HIV. Data will be utilized in fiscal year 2002 for comprehensive program planning.
- Collaborated with several other agencies to coordinate an annual HIV/AIDS symposium.
   The symposium is attended by more than 200 people, including health care providers, stu-

dents, teachers, social workers and HIV-infected and HIV-affected people. The symposium agenda includes information about the current epidemiology of HIV/AIDS, HIV prevention interventions, and human diversity.

#### The HIV/AIDS Surveillance Program

monitors the epidemic through both surveillance activities and HIV incidence and prevalence studies. The program's mission is to implement and conduct HIV/AIDS surveillance, to evaluate the performance of HIV/AIDS surveillance systems and to implement projects that enhance and extend the ability to plan for public health programs and resource allocation.

North Dakota continues to have the lowest prevalence of HIV/AIDS in the nation; through June 30, 2001, a total of 270 HIV infections had been reported in the state.

#### Accomplishments

- Modified the format of the HIV/STD Epidemiology Report to include the most recent HIV/ AIDS and sexually transmitted disease data.
   Released semi-annually, the report also is posted on the HIV/AIDS website for easy access by the public.
- Compiled the first *Epidemiological Profile of HIV/AIDS in North Dakota*. The profile is a comprehensive overview of HIV/AIDS and other indicators of high-risk behavior that contribute to acquiring HIV infection (i.e., data about sexually transmitted disease, substance abuse, Youth Risk Behavior Survey results, etc.). The profile is used by the North Dakota

Community Planning Group for HIV Prevention to determine at-risk populations in need of prevention interventions.

The Ryan White Comprehensive AIDS Resources Emergency (CARE) Act II Program conducts activities to improve the quality, availability and organization of health care and support services to people who have HIV and their families. Program activities are administered by case managers at 10 local public health units throughout the state. Assistance covered by Ryan White funds is subject to limitation but includes services such as HIV/AIDS medications, home health care, nutritional supplements, hospice care, mental health care and others as described by program policies. The Ryan White program is the payer of last resort.

#### Accomplishments

- Developed a client brochure to provide eligibility and service information to people living with HIV/AIDS in North Dakota.
- Worked collaboratively with North Dakota Medicaid on eligibility and coverage issues.
- Researched and began initial implementation of a cost-saving measure for medication reimbursement through the AIDS Drug Assistance Program.
- Regularly updated the Ryan White drug formulary to ensure client access to the most current HIV/AIDS medications and therapies.

#### <u>Tuberculosis Control and Elimination</u> <u>Program</u>

The Tuberculosis Control and Elimination Program's mission is to prevent, control and eventually eliminate TB in the state. Program activities include finding and reporting all cases of active TB, ensuring completion of therapy, finding and screening all people who have had contact with infectious cases of TB, evaluating them for TB infection and disease, conducting TB surveillance and offering public laboratory services.

TB continues to be a disease of low incidence in the state, with the number of cases ranging from five to 12 each year from 1996 through 2000.

#### Accomplishments

- Produced the annual *Epidemiological Report* on *Tuberculosis*, distributed to local TB controllers and health care providers throughout the state. The report includes information about the epidemiology of TB disease and infection in North Dakota during the most recent year and five-year period, new treatment or infection-control guidelines, changes in program administration or policy, laboratory information, and historical tidbits related to TB disease.
- Conducted an annual TB workshop, *Communities Working Together to Stop TB*, held in two locations across the state and reaching about 100 health care providers each year. The workshop provides participants with (1) information about the pathophysiology and epidemiology of TB, (2) the most current treatment and infection-control guidelines, and (3) techniques for skill building.

#### State Epidemiologist

The primary responsibilities of the state epidemiologist include coordinating epidemiological studies, investigations and surveillance activities; conducting data analysis; and providing technical expertise and consultation with public and private health professionals. Additional responsibilities include collaborating with other state and federal health professionals to conduct disease surveillance, control, prevention and health intervention activities. The state epidemiologist also provides public health information to health care providers, community organizations and the media.

#### Accomplishments

- Coordinated an agreement with CDC for funding to develop and implement an electronic data surveillance and analysis program.
- Coordinated with the Public Health Laboratory in the successful application for an epidemiology and laboratory capacity agreement with CDC.
- Coordinated an arboviral disease surveillance program, including West Nile virus.
- Co-authored an article published in *Infection Control and Hospital Epidemiology* highlighting problems associated with faucets after the 1997 flood in Grand Forks.
- Coordinated an epidemiological investigation with the North Dakota State Veterinarian and CDC that focused on an animal anthrax outbreak in eastern North Dakota, which resulted in identifying the first human anthrax case in the

- nation since 1992; assisted with a poster presentation at a national anthrax conference; and worked with CDC to develop an article for publication in the *Morbidity and Mortality Weekly Report*.
- Co-authored an article published in *Emergency Medicine* focusing on carbon monoxide exposures from gas-powered washers associated with the 1997 flood in Grand Forks.
- Coordinated four foodborne-outbreak investigations.
- Made numerous presentations to various groups concerning bioterrorism.
- Assisted with Public Health Laboratory bioterrorism and Health Alert Network continuation grants.
- Served on state Weapons of Mass Destruction Work Group, and assisted with development of state disaster-response plan.
- Assisted with coordination of U.S. Department of Justice assessment of public health terrorismpreparedness capabilities.
- Participated in multidisciplinary work group to develop plan for response to potential footand-mouth disease outbreak.

#### Local Health Coordinator

The local health coordinator acts as liaison between the NDDoH and local public health units and other key public and private partners. The local health coordinator administers the State Block Grant, which provides funding to local public health units, and advises the state health

officer about issues related to local public health. In addition, the local health coordinator works with staff members to assist public health units during disease outbreaks and natural disasters.

#### Accomplishments

- Assisted in the development of local public health units in Towner and Rolette counties; with the addition of these health units, every county now provides public health services.
- Coordinated development of the North Dakota Arthritis Program.
- Obtained CDC funding for local public health unit bioterrorism preparedness and infrastructure development.
- Coordinated participation of a six-member state and local public health team in a regional public health leadership institute; as a team project, the group developed a local public health bioterrorism response plan.
- Worked with local public health units to complete a Department of Justice bioterrorismpreparedness survey; each LPHU coordinated a comprehensive county-level response, which included all emergency responders.

#### Division of Microbiology

The Division of Microbiology (the Public Health Laboratory) provides diagnostic and referral services to physicians, veterinarians, clinics, hospitals, local public health units, other NDDoH divisions, other agencies and the public. The laboratory performs testing in the areas of

bacteriology, mycology, mycobacteriology, parasitology, immunology, virology, molecular diagnostics, aeroallergens and dairy and water bacteriology. In addition, specialty testing is performed for new and emerging infections and possible bioterrorism incidents.

The laboratory continues to serve as the state's central laboratory and certifying agency for the Food & Drug Administration (FDA) and the Environmental Protection Agency (EPA) dairy and water bacteriological testing programs.

#### Accomplishments

- Established a biosafety level-3 containment laboratory to respond to bioterrorism threats and new and emerging infectious diseases.
- Increased molecular diagnostic testing program.
- Expanded mosquito surveillance program to include statewide sentinel sites for encephilitis detection, such as West Nile virus.
- Established a direct link to the CDC that allows electronic exchange of microscopic images for consultation during outbreak situations.
- Joined PulseNet, a national network of public health laboratories that perform DNA fingerprinting on microorganisms associated with foodborne diseases.
- Established a statewide screening program for non-0157 shiga toxin-producing *Escherichia coli*, an important cause of diarrheal illness and hemolytic uremic syndrome.
- Added the amplified tuberculosis test to provide rapid identification and initiation of treatment for patients who have TB.

- Instituted aeroallergen sampling for daily pollen, mold and spore counts.
- Established the Laboratory Response Network in North Dakota, a tiered network of laboratories trained in procedures to recognize and/or rule out potential bioterrorism agents.
- Passed three federal certifications: FDA Grade A dairy product testing, EPA safe drinking water testing and HCFA clinical testing.
- Provided training for laboratorians and health care providers, including Level A Laboratory Training for Bioterrorism Agents, Antibiotic-Resistent Organisms, Amplified Molecular Technology and Hepatitis C Virus Testing.

#### Microbiology Testing

Category	Number of Tests
Dairy Products HIV Tuberculosis Mycology Parasite Prenatal Hepatitis Rabies Food Bacteriology STDs Virology/Immunology	10,810 28,350 9,334 1,296 3,752 9,408 2,640 7,176 43,184 2,360
Water Analyses  Total	20,602
iotai	100,012

- Updated data management system to allow linkage with other laboratories, health care practitioners and public health officials.
- Produced various documents, including newsletters, bulletins, fact sheets and a directory of service; developed a web page.
- Responded to needs identified in a customer satisfaction survey that included changes in mailing containers and conversion to an itemized test-request form.

#### Goals

- Function as part of the National Laboratory System to improve communications with the medical community, local laboratories and public health units.
- Participate in biomonitoring and human exposure assessment; work with private, tribal and state agencies to provide initial screening protocols, if needed.
- Enhance molecular testing to include bioterrorism response agents, vectorborne encephalitis viruses, foodborne pathogens and emerging patterns of antibiotic resistance.
- Establish electronic (web-based) reporting to laboratory and health care agencies.

## **Environmental Health Section**

The Environmental Health Section's five divisions work closely with the federal Environmental Protection Agency (EPA) to safeguard the quality of North Dakota's air, land and water resources. Staff members deal with issues that affect the comfort, health, safety and well-being of all North Dakota citizens and their environment. Enforcement of state and federal environmental laws is accomplished through permitting, inspecting, sampling, analytical services and monitoring activities.

An important department goal is to maintain delegation of all federal environmental programs for North Dakota and to ensure that the regulated community complies with state environmental statutes.

The Environmental Health Section consists of the following divisions:

- Chemistry
- Air Quality
- Waste Management
- Municipal Facilities
- Water Quality

Division activities are coordinated by the section chief's office. Employees in this office oversee quality assurance procedures and coordinate computer and data management activities, as well as environmental emergency response efforts.

The section's role in the initial response to an environmental incident is one of support to local responders and the Division of Emergency Management. The section customarily takes the

lead role in post-emergency environmental cleanup activities.

The section chief's office coordinates the annual state/EPA agreement, which defines the scope of environmental program responsibilities and commitments made by the section and the EPA.

An assistant attorney general, located in the section chief's office, provides legal counsel to all divisions of the section and assistance with enforcement procedures regarding violations of state environmental laws. During the biennium, this involved resolving violations of air, water pollution, hazardous waste and solid waste management statutes and rules.

The section chief's office also includes a small business ombudsman. The ombudsman serves as an advocate for small businesses in need of assistance to understand and comply with environmental laws and rules.

The section encourages public participation through opportunities for public comment, public hearings and the establishment of ad hoc task forces and advisory groups.



#### **Division of Chemistry**

The Division of Chemistry provides analytical services to a variety of environmental protection, public health, agricultural and petroleum regulatory programs and laboratory certification for a variety of environmental protection programs. The NDDoH's environmental protection programs use analytical data generated by the laboratory to regulate air quality; solid and hazardous waste; municipal wastewater; agricultural runoff; surface, ground, and drinking water quality; petroleum products; and other media of environmental or public health concern.

The Department of Agriculture uses analytical data generated by the laboratory to regulate livestock and pet foods, and agricultural and home-use fertilizers.

The division consists of seven analytical laboratory sections and one laboratory certification section. The following describes each analytical laboratory:

- Biochemical Oxygen Demands Analytical Laboratory: Performs tests such as biochemical oxygen demand, total suspended solids, pH, and chemical oxygen demand. The lab provides analytical data used to determine compliance with permit requirements of municipal and industrial wastewater discharges.
- Feed and Fertilizer Lab: Provides analytical data to the Department of Agriculture. This lab tests agriculture feeds and fertilizers, as well as pet foods and lawn and garden fertilizers, to determine compliance with labeling.

- Mineral Lab: Tests a variety of matrices for major cation and anion parameters. Typical analyses include fluoride, chloride, chemical oxygen demand, nitrate, sodium, ammonia and total Kjeldahl nitrogen.
- Organic Lab: Provides identification and quantification of insecticides, herbicides, volatile and semi-volatile organic compounds, PCBs and other synthetic organic compounds in multiple matrices. Matrices include drinking, surface and ground water; soil; river and lake sediments; foliage; fish tissue; sludge; oil; landfill wastes; and other environmental sources.
- **Petroleum Lab:** Tests petroleum products such as gasoline and diesel for product quality.
- Radiation Lab: Identifies and quantifies radioactive elements in public drinking water supply systems and radon analysis. The laboratory also participates in a nationwide monitoring program that looks at the trends in atmospheric background radiation through bulk air samples.
- Spectroscopy Lab: Identifies and quantifies metal concentrations in drinking water sources and distributions, surface and ground water resources, fish, hazardous and solid wastes, river and lake sediments, and other environmental media.

#### Accomplishments

 Continued to assist the Environmental Health Section during environmental emergencies. The laboratory provides 24-hour services during major emergencies to ensure timely response. Some analysis associated with emergency situations this biennium included:

- \* Increased atmospheric radiation testing in response to the radiation accident in Japan Sept. 29, 1999.
- \* Analyzed water and soil samples from a chemical spill that resulted from a semi-truck accident near Minot, N.D., in February 2000.
- \* Analyzed water and soil samples relating to a potential pesticide poisoning of livestock in eastern North Dakota in March 2000.
- Provided analytical support to help public water systems comply with federal and state drinking water rules and regulations. About 6,800 samples were tested for more than 28,800 analytical components, including nitrates, metals such as lead and copper, fluoride, pesticides and volatile organic compounds such as benzene and toluene.
- Provided the analytical services necessary to monitor ground water quality across the state.
   Testing included nitrates, metals, pesticides and general water quality parameters. In addition, the laboratory analyzed samples for the environmental assessment of ground water and other factors related to feedlot operations.
- Participated in special projects in addition to routine analyses. For example, the division analyzed ground water from the Oakes Aquifer for nitrate contamination from various sources, including agricultural production.
- Maintained Internet website to provide information about the division's services, sample submission procedures, analytical procedures, quality assurance plan and other general topics.

- Continued to participate in several laboratory performance evaluation programs, which the division regularly completes successfully. In addition, the division certifies the state's environmental laboratories and reviews and recognizes other states' certifications for out-of-state laboratories that meet the requirements of North Dakota's certification program.
- Continued to provide information to other laboratories through training and conferences.
- Analyzed nearly 35,500 samples for more than 342,000 analytical parameters.

#### Goals

- Maintain or increase laboratory efficiency and responsiveness, and provide continued analytical support for environmental protection, public health, agriculture, and petroleum regulatory programs.
- Continue membership in performance evaluation programs. The division will maintain current EPA laboratory certification and obtain certification for new drinking water components as they become regulated by EPA.
- Resolve critical life-safety and ventilation deficiencies in the existing laboratory building via a laboratory addition approved by the 2001 Legislative Assembly.

### Division of Air Quality

Programs in the Division of Air Quality focus on air pollution control, radiation control, indoor air quality, radon, asbestos, and occupational safety and health onsite consultation. Staff members also provide technical assistance during emergency response efforts.

#### **Air Pollution Control Program**

The Air Pollution Control Program is responsible for protecting the state's air quality. Staff members promote clean air activities and initiate enforcement actions to correct air pollution problems.

Major activities include issuing conditional permits for the construction and operation of sources that emit air pollution, registering oil and gas wells, investigating air pollution complaints and operating a statewide ambient air quality monitoring network.

#### Accomplishments

- Maintained attainment status for all National Ambient Air Quality Standards.
- Processed 97 percent of submitted Title V permit applications.
- Initiated rule revisions and program development for several state and federal programs.
- Conducted system and/or performance audits for industries that report ambient air quality data to the NDDoH.
- Operated a transboundary air quality monitoring network along the United States/Canadian

- border through a cooperative effort with Canadian officials.
- Audited and monitored more than 200 emission tests at sources throughout the state.
- Responded to more than 100 air pollution complaints.
- Completed all inspections required by state/ EPA agreements.
- Initiated enforcement activities for four sources.
- Assisted new sources in the state to obtain permits to construct and operate in the state.
- Responded to numerous questions from the public regarding a variety of air quality issues.
- Issued 25 permits to construct; issued or renewed more than 100 minor source permits to operate.

#### Goals

- Complete all Title V permit applications.
- Implement Maximum Achievable Control Technology standards at applicable sources.
- Implement the regional haze reduction program.
- Implement the compliance assurance emissions monitoring program.
- Reach consensus regarding the status of Class I increment in North Dakota.
- Provide staff at field offices in Fargo to increase effectiveness in responding to environmental issues in eastern North Dakota.

#### Occupational Safety and Health Program

At the request of employers, the Occupational Safety and Health Program provides onsite safety and health consultation surveys that focus

on physical and chemical hazards found in workplace environments.

The program has provided information and training to small businesses about topics emphasized by the federal Occupational Safety and Health Administration, including silica, trench hazards and fall protection in grain handling industries. Staff members also provide interpretation of federal standards for workplace safety.

#### Accomplishments

• Performed more than 200 health and worker safety surveys at the request of employers.

#### Goals

Perform employer-outreach activities to promote onsite consultations.

#### **Radiation and Asbestos Control Program**

The Radiation and Asbestos Control Program monitors the development and use of ionizing and nonionizing radiation sources to protect the health and safety of North Dakotans and the environment. The program also regulates asbestos through a contractor licensing, worker certification and inspection program.

The program licenses radioactive material users and registers X-ray facilities. Staff members track more than 75 radioactive material licensees and more than 750 X-ray registrants. The program also includes a radon education outreach program and a nonoccupational indoor air quality program.

The 2001 Legislative Assembly passed legislation directing the NDDoH to develop rules

governing lead-based paint. The department is currently drafting the regulations.

#### Accomplishments

- Provided professional training and technical assistance to local public health units in response to indoor air quality concerns related to excessive moisture. In addition, the program responded to citizen calls about the issue.
- Established agreements with the American Lung Association to assist in outreach activities.
- Annually inspected all facilities that provide mammography services for compliance with the Mammography Quality Standards Act. An additional 120 X-ray facilities were inspected for compliance with state rules.
- Published a radioactive materials newsletter and an indoor air quality newsletter to improve communication between the NDDoH and the citizens of North Dakota.
- Created radon partnerships with seven local public health units, the American Lung Association of North Dakota and two home builder and realtor organizations. The purpose was to extend radon education to the public and various trade groups. Direct intervention resulted in radon mitigation or reduction in several schools and public buildings.
- Distributed a summary of asbestos requirements to 5,000 contractors each year.

#### Goals

• Continue efforts to raise awareness and provide mitigation of radon in all buildings.

- Enhance response to indoor air quality problems by direct intervention and assistance to local public health personnel.
- Improve radiation safety through better public outreach and education; increase compliance inspection frequency through restructuring and improved efficiency.
- Improve local and city government participation in informing contractors of the asbestos requirements related to demolition and renovation of buildings.
- Develop and implement lead-based paint regulations, and seek U.S. EPA authorization of the North Dakota LBP program.

# Division of Waste Management

The Division of Waste Management administers several programs that safeguard public and environmental health in the state. These programs are designed for generators of solid and hazardous waste and operators of underground storage tanks.

The division includes the following:

- Hazardous Waste
- Polychlorinated Biphenyls (PCB)
  Inspection
- Underground/Above Ground Storage Tank
- Petroleum Product Testing
- Bulk Antifreeze Registration
- Solid Waste
- Abandoned Motor Vehicle

#### **Hazardous Waste Program**

The Hazardous Waste Program regulates facilities that generate, store, treat, dispose of or transport hazardous waste. The program works to ensure safe waste management so that hazardous waste generated or managed in the state does not adversely affect human health or the environment. The program also encourages minimizing or eliminating the generation of hazardous waste.

#### Accomplishments

- Conducted permitting and routine inspections of the regulated community, which consists of about 750 businesses that have notified the division of hazardous waste activity. This includes about 180 small quantity generators, 35 transporters, 13 large quantity generators and eight permitted treatment, storage and disposal facilities.
- Provided training for businesses that generate hazardous waste to help them comply with hazardous waste rules. About 175 people attended the training.
- Terminated a closed facility permit and modified or approved modifications to several existing permits. Five facilities are conducting corrective action to investigate, and, if necessary, remediate contaminated soil or groundwater; the Minot and Grand Forks Air Force bases have completed the process. All five facilities have controlled exposure to humans and releases to groundwater. North Dakota was the first state to meet this national goal.
- Inspected about 120 facilities that generate or manage hazardous waste. Several facilities

- requested compliance assistance visits to determine what actions, if any, were needed to meet requirements.
- Worked with the U.S. Drug Enforcement Agency and the N.D. Bureau of Criminal Investigation to clean up clandestine drug labs.
- Assisted in the cleanup of emergency-response spills and responded to citizen complaints.

#### Goals

- Reissue appropriate hazardous waste permits.
- Continue to review investigation reports, proposed remedies and remediation progress at facilities with corrective-action permits.
- Conduct training that provides a general overview of regulations and requirements and helps businesses comply with state rules.
- Maintain partnership between the program and the regulated community. This partnership has had a positive impact on the regulated community's compliance, which protects public health and the environment from mismanagement of hazardous waste in North Dakota.

# Polychlorinated Biphenyls (PCB) Inspection Program

Funded through an EPA Toxic Substance Control Act grant, the PCB Inspection Program conducts inspections at facilities or sites known or suspected to have equipment containing PCBs. North Dakota is one of only six states that received federal grants to administer a PCB inspection program in lieu of EPA inspections.

#### Accomplishments

- Conducted about 30 inspections, with emphasis on facilities that had not been inspected for several years. Inspection reports were forwarded to EPA, which initiated enforcement action for any noncompliance with federal rules.
- Encouraged facilities to manage unregulated PCB articles, such as fluorescent light ballasts, in the same manner they manage regulated PCB articles.
- Assisted American Indian tribes in investigating and managing suspected PCB articles.

#### Goals

- Maintain the PCB inspection program.
- Provide guidance and public outreach on the proper handling and disposal of PCB wastes.

#### **Underground Storage Tank Program**

The Underground Storage Tank (UST)
Program regulates certain types of tanks, establishes technical standards for the installation and operation of underground storage tanks, maintains a tank notification program, establishes financial responsibility requirements for tank owners and provides for state inspection and enforcement.

UST regulations were developed to ensure attainment of the following goals: find leaks and spills, correct problems created by leaks and spills, prevent future leaks and spills, and ensure that owners and operators of USTs can pay to correct the problems created by leaking tank systems. Leaking USTs can cause fires or explosions that threaten human safety or can contaminate nearby groundwater.

#### Accomplishments

- Regulated 925 active tank facilities, for a total of 2,273 tanks. Compliance is monitored by a mail-in self-certification process, as well as onsite visitations. The program observed 268 tank closures, conducted 500 onsite inspections, and investigated and monitored cleanup of 130 leaking UST sites.
- Collected and analyzed 802 petroleum samples in cooperation with other agencies; processed and notified petroleum retailers of analysis results, including octane, distillation, etc.
- Registered 12 antifreeze manufacturers and 136 bulk antifreeze retailers.
- Used Leaking Underground Storage Tank (LUST) Trust Fund money to investigate suspected UST releases and to conduct corrective actions when a release had occurred but the responsible party was recalcitrant, unable to pay or could not be identified. Three abandoned commercial sites were investigated, USTs removed and property remediated. LUST Trust Fund money also was used to initiate cleanup of diesel contamination in downtown Mandan.
- Continued public outreach to inform tank owners about proper maintenance and operation of USTs for compliance with state regulations. More than 7,300 USTs have been removed during the 12 years the UST Program has been in existence. Many of these tanks leaked or had the potential to leak.

#### Goals

- Assist tank owners with contamination assessment/cleanup activities following upgrade and/or replacement of USTs or when leaks occur.
- Provide compliance monitoring and inspections, along with public outreach, to inform tank owners about the proper operation of USTs (e.g., leak detection, spill reporting, etc.).
- Use LUST Trust Fund money to investigate and properly close additional abandoned UST sites throughout the state; continue with remediation of downtown Mandan.
- Collect petroleum samples from retailers and respond to product and labeling deficiencies.

#### **The Solid Waste Program**

The responsibility of the Solid Waste Program is to plan for and regulate the safe collection, transportation, storage and disposal of inert, industrial, special and municipal solid wastes. The program promotes resource recovery, waste reduction and recycling systems that preserve and enhance the quality of our natural resources. The program assists individuals, businesses and communities in providing efficient, environmentally acceptable solid waste management systems.

#### Accomplishments

- Regulated and permitted 14 municipal solid waste landfills, 304 waste haulers, 31 transfer stations, two industrial waste landfills, 21 special waste (energy and oil industry) landfills and 182 inert waste landfill facilities.
- Worked with the city of Grand Forks to find a new landfill site; evaluated the proposed

- expansion of the Big Dipper Enterprises/Waste Management Inc. landfill near Gwinner.
- Assisted in a number of voluntary evaluations and cleanups of scrap metal/auto salvage facilities, a fertilizer manufacturing facility, a food processing facility, an abandoned rendering plant, a gasoline pipeline, and numerous oil product and oil field releases and spills.
- Evaluated various tire disposal problems and issues, including illegal disposal, improper management, and potential fire, water pollution and disease concerns.
- Conducted annual landfill operator training and certification sessions attended by about 40 landfill operators and solid waste professionals.
- Worked with generators and developed guidelines to utilize coal ash for low-strength flowable fills, road construction, abandoned-mine reclamation, and land stabilization for cropstorage areas and feedlots.
- Worked with the Division of Emergency
   Management and the state veterinarian's office
   to develop emergency disposal procedures in
   the event of a livestock infestation with foot and-mouth disease, mad-cow disease, or other
   livestock illnesses or disasters.
- Implemented Nutrient Management Plan requirements to help seven food processors and 17 livestock sales facilities recycle their organic waste materials.
- Co-hosted annual solid waste symposiums and made numerous presentations to civic leaders, solid waste professionals and interested citizens about integrated waste management, including waste reduction and recycling, composting,

- disposal, and waste hauling.
- Worked with various nonprofit organizations to develop educational materials, host workshops and partner in federal grant opportunities.

#### **Abandoned Motor Vehicle Program**

The Abandoned Motor Vehicle (AMV) Program focuses on assisting political subdivisions to complete cleanup of scrap metal around the state.

#### Accomplishments

- Worked with local public health units to complete AMV projects in Benson, Ramsey, Ransom and Cass counties, and facilited priority cleanups in several smaller communities; began surverying additional counties in First District and Custer District health units. About 3,400 tons of scrap metal was collected and recycled through the program.
- Evaluated tire disposal problems in Benson County and facilitated cleanup of numerous tiredisposal sites.

#### Goals

Continue to promote the use of AMV funds to remove unwanted scrap and to evaluate alternative uses and management of scrap tires.

#### **Pollution Prevention**

Beginning in the fall of 2001, the NDDoH will implement an EPA Pollution Prevention (P2) grant. Pollution prevention is at the heart of most Environmental Health Section programs. The grant will help expand the state's P2 infrastructure

by promoting waste reduction and reuse on the community and state levels, providing assistance for training and education, expanding the state's P2 program, and sharing information with other programs within U.S. EPA Region VIII. The state's priority is development and implementation of nutrient management plans to address proper management of livestock and other agricultural wastes.

# Division of Municipal Facilities

The division consists of four programs that help municipalities and other political subdivisions maintain public health and safety: the Public Water Supply Supervision (PWSS) Program; the Operator Training, Certification and Facility Inspections Program; the Drinking Water State Revolving Loan Fund (DWSRF) Program; and the Clean Water State Revolving Loan Fund (CWSRF) Program.

#### **Public Water Supply Supervision Program**

The PWSS Program works with the 538 public water systems in North Dakota to ensure that drinking water meets all standards established by the Safe Drinking Water Act (SDWA). This is accomplished by monitoring contaminants, providing operator training and certification, conducting sanitary surveys, reviewing plans and specifications, and providing technical assistance. The program also administers the state's fluorida-

tion program and provides technical assistance to private water systems.

# Operator Training, Certification and Facility Inspections Program

The Operator Training, Certification and Facility Inspections Program trains and certifies people in charge of the day-to-day operation of water treatment and distribution facilities, as well as wastewater collection and treatment plants. There are 825 certified operators in the state.

Four inspectors/trainers annually inspect about 725 public water and wastewater systems and inert landfills to ensure that facilities comply with state and federal public health standards. Program activities contribute to the proper operation and maintenance of these facilities.

#### **Drinking Water State Revolving Fund**

The DWSRF Program provides low-interest loans to help public water systems finance the infrastructure needed to comply with the SDWA. Funding is expected to continue at least through fiscal year 2003, during which about \$58 million will be provided to maintain the fund. To date, loans totaling about \$43.5 million have been approved to assist North Dakota water systems.

Program staff members also review about 150 drinking water projects each year. The reviews ensure that new or modified public water system facilities meet state design criteria before construction. The reviews help ensure that the facilities achieve desired public health objectives and can be properly operated and maintained.

#### **Clean Water State Revolving Fund**

The CWSRF Program provides low-interest loans to fund conventional wastewater and nonpoint source pollution control needs.

Funding for the program is expected to continue at least through fiscal year 2005 and will provide about \$100 million to maintain the revolving loan fund. Eligible borrowers can obtain financing to build wastewater treatment works at below-market interest rates. In addition, staff members review plans for new and modified wastewater systems; about 150 plans are reviewed each year.

#### Accomplishments

• Complied with all major federal program requirements and maintained federal delegation responsibilities for EPA programs.

#### Goals

- Maintain responsibility for federally mandated programs.
- Continue to provide funding for the state's drinking water and wastewater needs.

#### CWSRF Projects Funded Between July 1, 1999, and June 30, 2001

Carron Dahahilitation

Amenia	Sewer Rehabilitation		\$154,600
Buffalo	Wastewater Treatment		215,726
Buxton	Wastewater Treatment		77,000
Cogswell	Wastewater Treatment		100,000
Emerado	Wastewater Treatment		502,673
Enderlin	Wastewater Treatment		1,225,000
Fargo	Stormwater		1,816,295
Forman	Sewer Rehabilitation		140,000
Grand Forks (increase)	Wastewater Treatment		13,781,500
Hankinson	Sewer Rehabilitation		173,000
Hunter	Wastewater Treatment		241,000
Jamestown (increase)	Wastewater Treatment		425,000
Jamestown	Stormwater		820,000
Jamestown	Stormwater		513,000
Lidgerwood	Sewer Rehabilitation		95,000
Lisbon	Sewer Rehabilitation		130,000
Lisbon	Sewer Rehabilitation		765,000
Mayville	Sewer Rehabilitation		1,075,000
Mayville	Sewer Rehabilitation		1,170,000
Stanley	Wastewater Treatment		104,000
Ward County WRD	Collection & Interceptor		840,000
		Total	\$24,363,794

¢154 600

### Division of Water Quality

The primary statute providing for water quality protection is the federal Clean Water Act of 1972. This act and its amendments have proven to be the driving force behind many recent water quality improvements.

Even before the federal Clean Water Act, North Dakota had its own law to protect water quality, the North Dakota Water Pollution Control Act enacted in 1967. The NDDoH is largely responsible for monitoring the quality of the state's lakes, streams and rivers. The Division of Water Quality helps ensure that water stays clean for people today and in the future.

Polluted water may carry certain diseases that result in dangerous illnesses and increased health care costs. Contaminated water costs more to treat and is less appealing for recreational uses. And, of course, there is an environmental cost since polluted water affects the plants and animals dependent upon it.

Water quality in North Dakota and the nation has improved since passage of the Clean Water Act in 1972, but much remains to be done if the goal of restoring and maintaining the quality of the state's and nation's waters is to be achieved.

#### **Water Quality Standards**

The Water Quality Standards were revised to accommodate the contemporary needs of the state and to incorporate the latest scientific information. The standards establish the beneficial uses of the state's water and assign numeric criteria for chemical concentrations necessary to

achieve the designated uses. The Water Quality Standards provide guidance to the North Dakota Pollutant Discharge Elimination System Program, as well as sets goals for the Nonpoint Source Pollution Management Program.

#### **Water Quality Certification Program**

The NDDoH reviews federal Section 404 dredge and fill applications to determine compliance with the State Water Quality Standards. The NDDoH expedites the review of all flood control and infrastructure protection projects.

#### **Devils Lake Flooding**

The NDDoH maintains lead agency status on monitoring water quality and providing technical information in the Devils Lake basin. The monitoring consists of seven sites in the Devils Lake chain of lakes. The NDDoH also is involved in special studies as needed and the U.S. Army Corps of Engineers environmental impact statement development process. Implementation of the Devils Lake Water Management Plan is necessary to achieve long-term solutions for flooding in the Devils Lake basin. Technical assistance has been provided for protection and maintenance of water distribution and wastewater treatment systems. The NDDoH also has provided regulatory oversight for threatened fuel storage areas, potential hazardous materials sites and other environmental threats.

#### Pollutant Discharge Elimination System Permit Program

Point source pollution is defined simply as

pollution coming from a specific source, like the end of a pipe. Environmental regulations implemented during the last 20 years have resulted in a significant reduction in pollution from major point sources; for example, municipal and industrial wastewater treatment facilities.

Since 1975, the NDPDES Program has issued about 500 wastewater discharge permits (25 percent industrial and 75 percent municipal).

Beginning in 1992, permits have been required for storm water discharges associated with construction activities and industrial facilities.

About 750 facilities are covered by general permits for storm water discharges. The NDPDES Stormwater Program currently is being updated to implement the Environmental Protection Agency's (EPA) Phase II requirements.

Impacts to water from livestock operations are an increasing concern in North Dakota. Currently, more than 900 livestock facilities have been approved to operate. Most of these are cattle-wintering, hog, and dairy facilities that are part of a farmer's total farm operation. However, the number of confined feeding operations for turkeys, hogs and dairy cattle has increased the past few years. As a result, the division has updated its approval process to require better management of animal waste.

#### Accomplishments

• Finalized a program package to transfer the regulatory authority for the wastewater pretreatment program from the EPA to the NDDoH.

- Issued "approvals to operate" to 16 livestock facilities in 2001; conducted 125 inspections at permitted livestock facilities; completed other complaint-related inspections and inspections of livestock facilities planning to upgrade.
- Worked with the Natural Resources Conservation Service, NDSU Extension Service and other entities to update nutrient management plan guidelines for concentrated feeding operations (CAFOs).
- Reviewed EPA's proposed updates to the rules for CAFOs and provided comment to EPA.
- Provided educational materials to livestock producers and the public about state livestock waste regulations and the impacts of livestock waste to water quality.

#### Nonpoint Source Pollution

#### **Management Program**

Most threatening to surface water resources is nonpoint source (NPS) pollution because this pollution does not come from one point. NPS pollution includes runoff from construction sites, city streets, livestock feedlots and agricultural lands. Runoff carries pollutants – including sediment, nutrients and pesticides – and deposits them in the state's waters.

Efforts to control NPS pollution primarily are achieved through the North Dakota NPS Pollution Management Program, which came into existence in 1987 with the addition of Section 319 to the Clean Water Act. Under Section 319, EPA is authorized to award grants to state or local groups to control NPS pollution. The NPS Pollution Task Force provides input and recom-

mendations about local projects funded through Section 319. The task force is composed of representatives from a number of public and private entities. The Division of Water Quality is responsible for administering these funds and implementing the NPS Pollution Management Program in North Dakota.

#### Accomplishments

- Provided financial support to more than 60 projects since 1990. Of these projects, 37 are currently active. While the size, type and target audiences of these projects may vary significantly, they all share the same basic goals:
  - \* To increase public awareness of NPS pollution
  - \* To improve or restore beneficial uses impaired or threatened by reducing and/or preventing delivery of NPS pollutants to waters of the state
  - \* To disseminate information about solutions to NPS pollution

#### **Surface Water Management**

Historically, surface water quality monitoring conducted by the division consisted of a network of chemical monitoring stations. Typical water quality variables for which monitoring was conducted included temperature, dissolved oxygen, pH, major ions, nutrients (i.e., phosphorus, ammonia, and nitrate) and fecal coliform bacteria. Currently, the division has 27 ambient chemical monitoring sites across the state. The division will maintain these as long-term monitoring sites to assess water quality trends and to describe the

general chemical character of the state's major river basins.

#### Accomplishments

- Expanded the surface water quality monitoring program to include biological monitoring in a rotating basin format. Fish and macro-invertebrate samples were collected from rivers and streams in the Red River basin from 1993 through 1996, the Souris River basin in 1997, the James River basin in 1998, and the Missouri River basin in 1999 and 2000. The goal is to develop a multi-metric Index of Biological Integrity of both fish and macroinvertebrates that will be used in a comprehensive assessment of the state's rivers and streams.
- Conducted detailed lake water quality assessments for the state's mid- and large-sized reservoirs, including Lake Darling and Upper Des Lacs in 1997; Jamestown and Pipestem in 1998; Lake Tschida, Patterson Lake and Bowman-Haley in 2000; Lake Ashtabula in 1999, 2000 and 2001; Lake Sakakawea in 1999 and 2001; and Upper Lake Oahe in 2000 and 2001. In addition, Devils Lake, the state's largest natural lake, has been sampled each year since 1994.
- Monitored for mercury and other contaminants by collecting fish from the state's lakes, reservoirs and rivers. In January 2001, the state compiled fish tissue data and issued its first statewide consumption advisory for mercury. Prior to this time, the state had issued advisories for specific lakes, reservoirs and rivers.

#### **Ground Water Program**

About 350,000 North Dakotans depend on ground water for their household drinking water supply. Of that number, about 245,000 people are served by cities or rural water systems, and slightly more than 100,000 people use private water wells for drinking water. Agriculture and industry also use large quantities of water on a routine basis.

North Dakota's ground water protection programs are designed to control potential sources of contamination. This is accomplished through permit programs, waste discharge limits, performance and design standards, contaminant remediation, and best management practices for NPS pollution. The degree to which contamination incidents are investigated or remediated depends upon the contaminant, its impact on the beneficial use of the resource and the overall risk to the public or the environment.

#### Accomplishments

 Completed the second five-year cycle of the Ambient Ground Water Quality Monitoring Program. More than 1,500 wells in 58 highpriority aquifers have been tested.

#### Wellhead and Source Water Protection Programs

The Wellhead Protection Program protects ground water resources by addressing the link between land uses and ground water quality. Potential contaminant sources in a defined protection area around a community's drinking water wells are identified. Communities then can deter-

mine if these sources should be removed, restricted or monitored.

The 1996 Amendments to the Safe Drinking Water Act (SDWA) established the Source Water Protection Program to serve as an umbrella of protection efforts for all public water systems, including ground water- and surface water-dependent systems. The Wellhead Protection Program continues for ground waterdependent systems. The Source Water Protection Program for surface water-dependent systems involves (1) the delineation of protection areas along rivers or reservoirs that provide source water for the systems and (2) an inventory of potential contaminant sources within the protection areas. Under both the Wellhead and Source Water Protection programs, the NDDoH assesses systems' susceptibility to potential contaminant sources found in their protection areas.

#### Accomplishments

 Continued to work on the minimum elements of wellhead and source water protection (delineation, contaminant source inventory, susceptibility). The 1996 SDWA Amendments require all states to complete the minimum elements of wellhead and source water protection by May 2003. Public water systems are encouraged to implement the voluntary elements, including the development of management strategies, contingency planning and public awareness programs.

#### <u>Underground Injection Control Program</u>

The Underground Injection Control (UIC) Program helps prevent contamination of underground sources of drinking water by injection wells, such as domestic or industrial wastewater disposal wells.

#### Accomplishments

• Revised state UIC rules to reduce potential impacts from high-risk disposal wells.

#### **Division Goals**

- Include a watershed approach in all monitoring, assessment and control programs.
- Develop BMPs for agricultural chemical storage facilities.
- Help local public water supply systems manage source water protection areas, including wellhead protection areas.
- Increase state level funding for NPS pollution projects to ensure that sufficient resources are available to address NPS pollution in the state.
- Expand the Livestock Waste Pollution Prevention Program, including public education and cooperation with other entities to implement approved, nonpolluting livestock waste systems.
- Increase public awareness of the proper construction, use and potential hazards of underground injection wells.
- Emphasize concerns about stormwater discharges by industries in selected watersheds.
- Refine and expand the monitoring and assessment of aquatic life.

- Expand monitoring for pesticides, revise information about pesticides and develop criteria that include pesticides currently in use.
- Increase funding for restoration of lakes. Although the list of potential clean lakes projects is growing, funds virtually have disappeared.
- Improve Geographic Information System (GIS) capabilities to help ensure multi-agency and public access to water quality data.
- Improve communication and data sharing among local, state and federal agencies to enhance management of water resources and to eliminate duplication of efforts.
- Ensure that revised water quality standards are user-friendly, utilize the most current information to ensure protection of human and aquatic life, support the state's commitment to protect each body of water's designated uses, and outline the department's regulation of point source discharges.

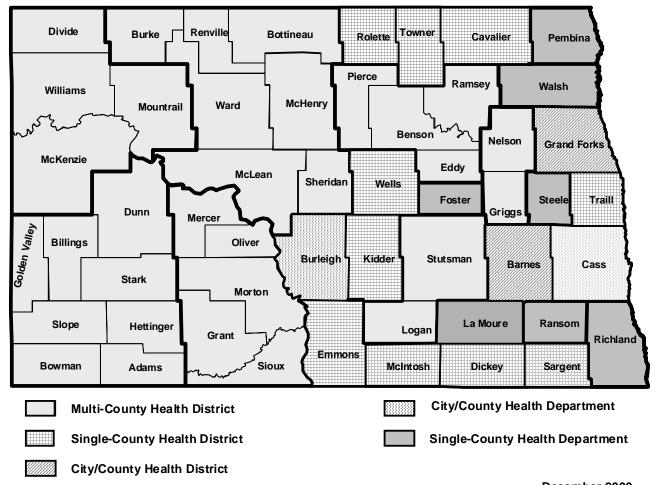
## Local Public Health Units

North Dakota's public health system is made up of 28 single- and multi-county local public health units (LPHUs).

Services offered by each LPHU vary, but all provide services in the areas of maternal and child health, health promotion and education, and disease prevention and control. Some local public health units maintain environmental health

programs; others partner with the NDDoH to provide environmental services, such as public water system inspections, nuisance and hazard abatement, and food service inspections.

Adopted by the 1999 legislature, N.D.C.C. Chapter 23-35 requires every county to have a LPHU. By Jan. 1, 2001, every North Dakota county provided public health service.



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Health Unit	Location	Administrators
Bismarck-Burleigh Public Health	Bismarck	Paula Flanders, RN
Cavalier County Health District	Langdon	Terri Gustafson, RN
Central Valley Health Unit	Jamestown	Sharon Unruh, RN
City-County Health Department	Valley City	Marcy Grant, RN
Custer District Health Unit	Mandan	Keith Johnson
Dickey County Health District	Ellendale	Roxanne Holm
Emmons District Health Unit	Linton	Bev Voller, RN
Fargo Cass Public Health	Fargo	Mary Kay Herrmann, RN
First District Health Unit	Minot	Lisa Clute
Foster County Health Department	Carrington	Jean Kulla, RN
Grand Forks Public Health Department	Grand Forks	Don Shields
Kidder County District Health Unit	Steele	Lana Fischer
Lake Region District Health Unit	Devils Lake	Karen Halle, RN
LaMoure County Health Department	LaMoure	Tony Hanson
McIntosh District Health Unit	Ashley	Shari Larson
Nelson/Griggs District Health Unit	McVille	Julie Ferry, RN
Pembina County Health Department	Cavalier	Mary Sandison, RN
Ransom County Public Health Department	Lisbon	Deb Bergstrom, RN
Richland County Health Department	Wahpeton	Betty Zimmerman
Rolette County Public Health District	Rolla	Linda Larson, RN
Sargent County District Health Unit	Forman	Colleen Sundquist
Southwestern District Health Unit	Dickinson	Carlotta Ehlis
Steele County Public Health Department	Finley	Diane Jacobson, RN
<b>Towner County Public Health District</b>	Cando	Tim Tracy
Traill District Health Unit	Hillsboro	Brenda Stallman, RN
Upper Missouri District Health Unit	Williston	Janice Trimmer

Grafton

Fessenden

**Walsh County Health Department** 

Wells County District Health Unit

Betty Jo Misialek, RN

Karen Volk, RN

# **Advisory Groups**

### State Health Council

#### **CHAIR**

Gary Riffe, health care, Jamestown

#### **VICE CHAIR**

Darlene Link, consumer, Minot

#### **SECRETARY**

Carmen Toman, consumer, Grand Forks

#### **MEMBERS**

Howard C. Anderson, R.Ph., health care, Turtle Lake Hjalmer Carlson, Jr., consumer, Minot Lowell Herfindahl, health care, Tioga Clifford R. Porter, energy industry, Bismarck Joel Smith, manufacturing and processing industry, Fargo Lori Wightman, R.N., M.S.H.A., consumer, Fargo Dennis E. Wolf, M.D., health care, Dickinson

### Physician Advisory Committee

James D. Brosseau, M.D., Grand Forks Julie A. Blehm, M.D., Fargo Dennis E. Wolf, M.D., Dickinson



# Financial Summary

### North Dakota Department of Health Comparative Statement of Appropriations and Expenditures

For the Period July 1, 1999, through June 30, 2001

Use of Funds	Original Appropriation		Emergency Commission Oct-99		Emergency Commission Jun-00		Adjusted Appropriation		Expenditures		Unexpended Appropriation	
Salaries & Wages	\$	26,162,622	\$	66,700	\$	85,800	\$	26,621,832	\$	25,445,045	\$	1,176,787
Operating Expenses		15,315,557	\$	151,000		12,500		15,479,057		13,221,535		2,257,522
Equipment		1,321,678	\$	180,300		16,800		1,518,778		1,412,441		106,337
Capital Improvements		40,446	\$	-				40,446		38,585		1,861
Capitol Const.Carryover		28,143	\$	-				28,143		26,197		1,946
Grants		23,984,130	\$	335,000		610,000		24,929,130		21,361,754		3,567,376
WIC Food Payments		18,226,930	\$	-				18,226,930		15,176,713	\$	3,050,217
Total	\$	85,079,506	\$	733,000	\$	725,100	\$	86,844,316	\$	76,682,270	\$	10,162,046
General Funds	\$	14,556,044					\$	14,594,615	\$	14,432,255		162,360
Federal Funds		65,538,343		733,000		725,100		67,192,725		58,391,004		8,801,721
Special Funds		5,056,976		,		•		5,056,976		3,859,011		1,197,965
Total	\$	85,151,363	\$	733,000	\$	725,100	\$	86,844,316	\$	76,682,270	\$	10,162,046

## North Dakota Department of Health Appropriations Report by Section

For the Period July 1, 1999, through June 30, 2001

Use of Funds	Adminstrative Services Section		Health Resource Section		Preventive Health Section		Er	nvironmental Health Section	Total Expenditures		
Salaries & Wages Operating Expenses Equipment Capital Improvements Grants WIC Food	\$	4,336,976 1,468,544 438,237 0 0	\$	3,932,303 837,291 55,390 0 1,535,978	\$	5,643,464 6,504,883 365,079 0 14,027,037 15,176,713	\$	11,532,300 4,410,818 553,734 64,782 5,798,741 0	\$	25,445,043 13,221,536 1,412,440 64,782 21,361,756 15,176,713	
Total	\$	6,243,757	\$	6,360,962	\$	41,717,176	\$	22,360,375	\$	76,682,270	
Total FTE's		51.0		47.0		74.0		136.0		308.0	

# Notes

To learn more about the North Dakota Department of Health, visit our website at www.health.state.nd.us.